

WE CLAIM:

1. A process for modifying flowering in plants which comprises transforming the plants with a construct comprising a complete or partial DNA sequence coding for an ATH1 gene product under the control of a promoter functional in plants.
2. A process as claimed in claim 1 whereby the flowering process in plants is promoted by transforming the plants using a construct that inhibits the production of ATH1 protein.
3. A process as claimed in claim 2 in which the construct is adapted to express RNA antisense to RNA produced by the ATH1 gene.
4. A process as claimed in claim 1 whereby the flowering process in plants is retarded by transforming the plants using a construct that promotes the production of recombinant ATH1 protein.
5. A plant gene construct useful in the process of claim 1 which comprises a complete or partial DNA sequence coding for an ATH1 gene product under the control of an inducible promoter functional in plants.
6. A plant gene construct useful in the process of claim 2 which comprises a complete or partial DNA sequence coding for an ATH1 gene product under the control of an promoter functional in plants, which product inhibits the production of ATH1 protein.
7. A plant gene construct as claimed in claim 6 in which the gene product is antisense RNA.

8. Transformed plant cells containing constructs claimed in any of claims 5-7.

9. A plant containing plant cells claimed in claim 8.

10. A genetically modified plant produced by the process claimed in any of claims 1-4.

11. A plant claimed in claims 9 or 10 which is a crop plant.

12. A plant as claimed in claim 11 which is rice, maize, wheat, barley, oats, rye, lettuce, endive, oilseed rape (canola), sugar beet, sunflower, soya or sorghum.

13. A process for inhibiting over-expression of ATH1 in plants claimed in any of claims 9-12 which comprises treating the plants with a gibberellin.

14. A process as claimed in claim 13 in which the gibberellin is A3 or A4/A7.

15. A plant in which the shade avoidance response is inhibited by the action of a transgene coding for a gene product that inhibits the formation of ATH1 protein.

16. A plant as claimed in claim 15 in which the transgene is a construct adapted to express antisense RNA.

17. A process for producing a plant as claimed in claims 15 or 16 which comprises:

transforming cells of a plant showing a shade avoidance response with a plant gene construct claimed in claim 7; and regenerating plants from said transformed plant cells.

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5 July 1999